Biotinylated Human CD19 full length protein-synthetic nanodisc

Cat. No. FLP100499B

DIMA BIOTECH

## PRODUCT INFORMATION

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|---|---|
| **Tag** | C-Flag and Avi Tag |
| **Target** | CD19 |
| **Synonyms** | B4; CVID3 |
| **Description** | Biotinylated Human CD19 full length protein-synthetic nanodisc |
| **Delivery** | In Stock |
| **Uniprot ID** | P15391 |
| **Expression Host** | HEK293 |
| **Protein Families** | Transmembrane |
| **Protein Pathways** | B Cell Receptor Signaling Pathway |
| **Molecular Weight** | The human full length CD19 Protein has a MW of 65.9 kDa. |
| **Formulation & Reconstitution** | Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for |
| **Storage & Shipping** | Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature. |
| **Background** | This gene encodes a member of the immunoglobulin gene superfamily. Expression of this cell surface protein is restricted to B cell lymphocytes. This protein is a reliable marker for pre-B cells but its expression diminishes during terminal B cell differentiation in antibody secreting plasma cells. The protein has two N-terminal extracellular Ig-like domains separated by a non-Ig-like domain, a hydrophobic transmembrane domain, and a large C-terminal cytoplasmic domain. This protein forms a complex with several membrane proteins including complement receptor type 2 (CD21) and tetraspanin (CD81) and this complex reduces the threshold for antigen-initiated B cell activation. Activation of this B-cell antigen receptor complex activates the phosphatidylinositol 3-kinase signalling pathway and the subsequent release of intracellular stores of calcium ions. This protein is a target of chimeric antigen receptor (CAR) T-cells used in the treatment of lymphoblastic leukemia. Mutations in this gene are associated with the disease common variable immunodeficiency 3 (CVID3) which results in a failure of B-cell differentiation and impaired secretion of immunoglobulins. CVID3 is characterized by hypogammaglobulinemia, an inability to mount an antibody response to antigen, and recurrent bacterial infections. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2020] |
| **Usage** | Research use only |
| **Conjugate** | Biotinylated |



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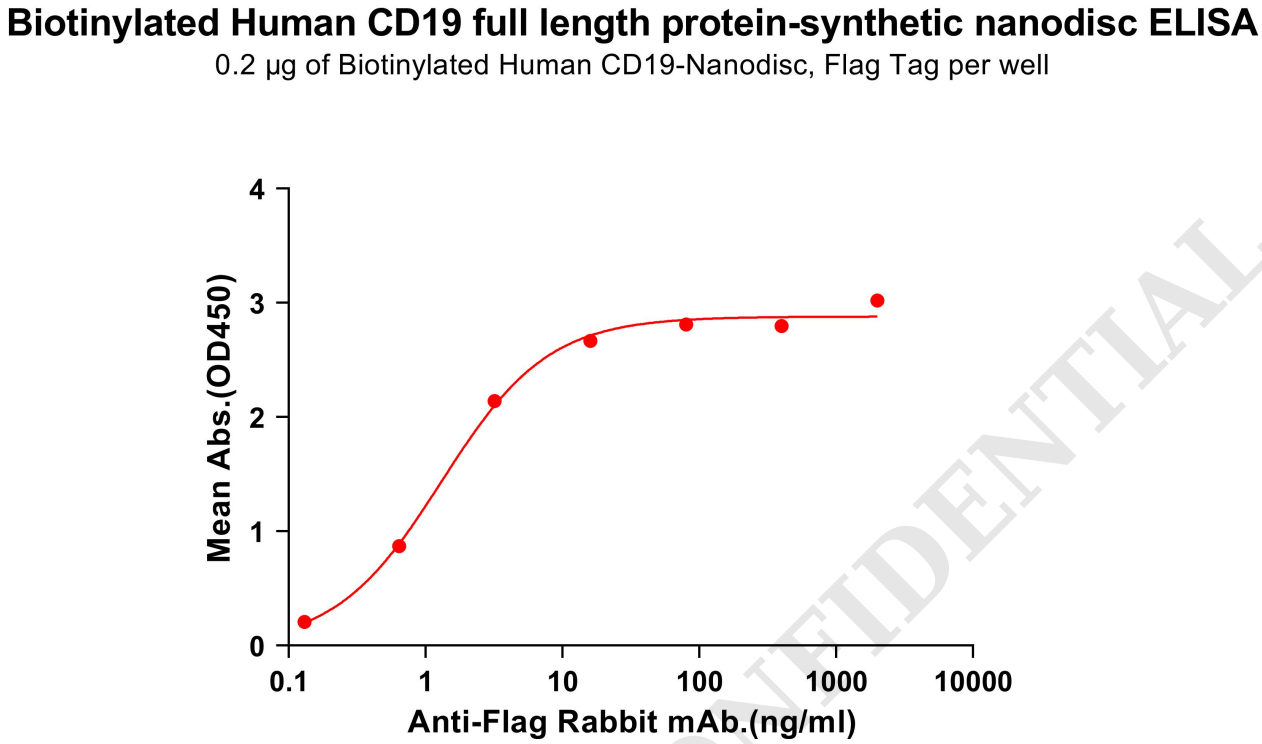


Figure 1. ELISA plate pre-coated by 2 μg/mL (100 μL/well) Biotinylated Human CD19 full length protein-synthetic nanodisc (FLP100499B) can bind Anti-Flag Rabbit mAb in a linear range of 0.13-16 ng/mL.

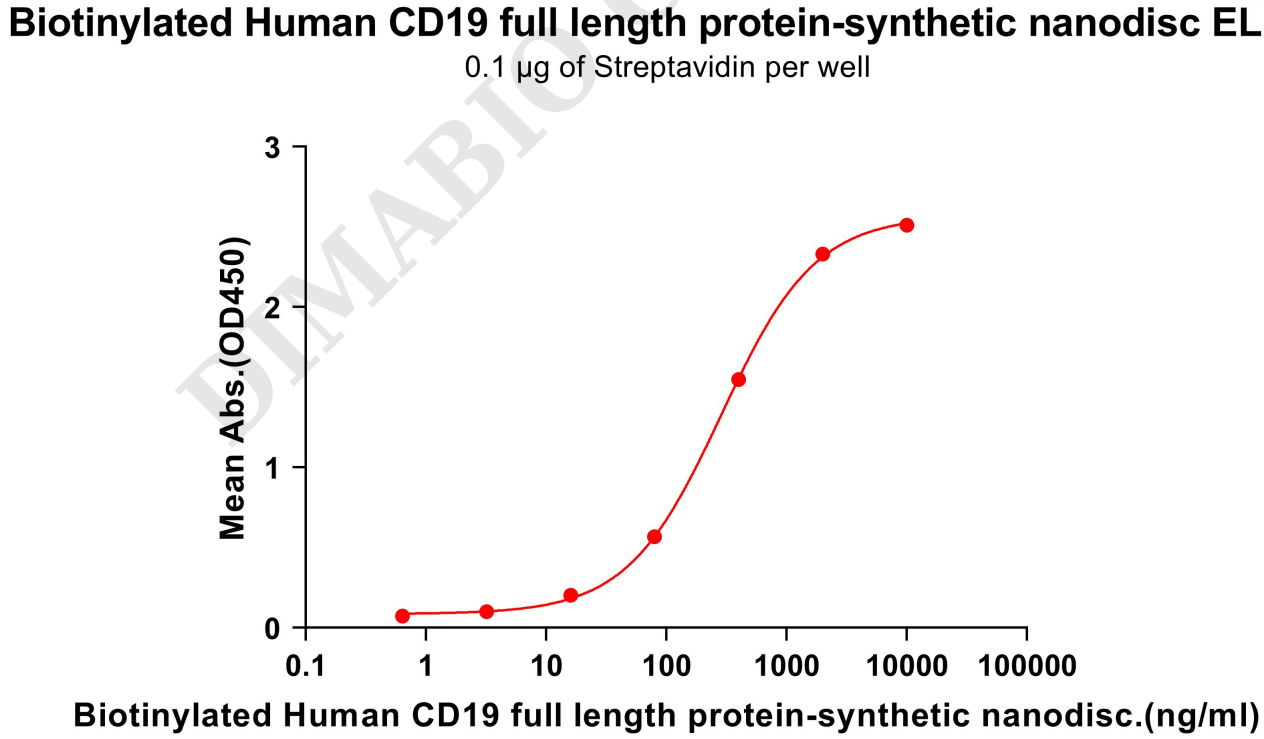


Figure 2. ELISA plate pre-coated by 1 μg/mL (100 μL/well) Streptavidin can bind Biotinylated Human CD19 full length protein-synthetic nanodisc (FLP100499B) in a linear range of 80-2000 ng/mL. In order to specifically detect FLP100499B, Anti-Flag Rabbit antibody was used as detection antibody.



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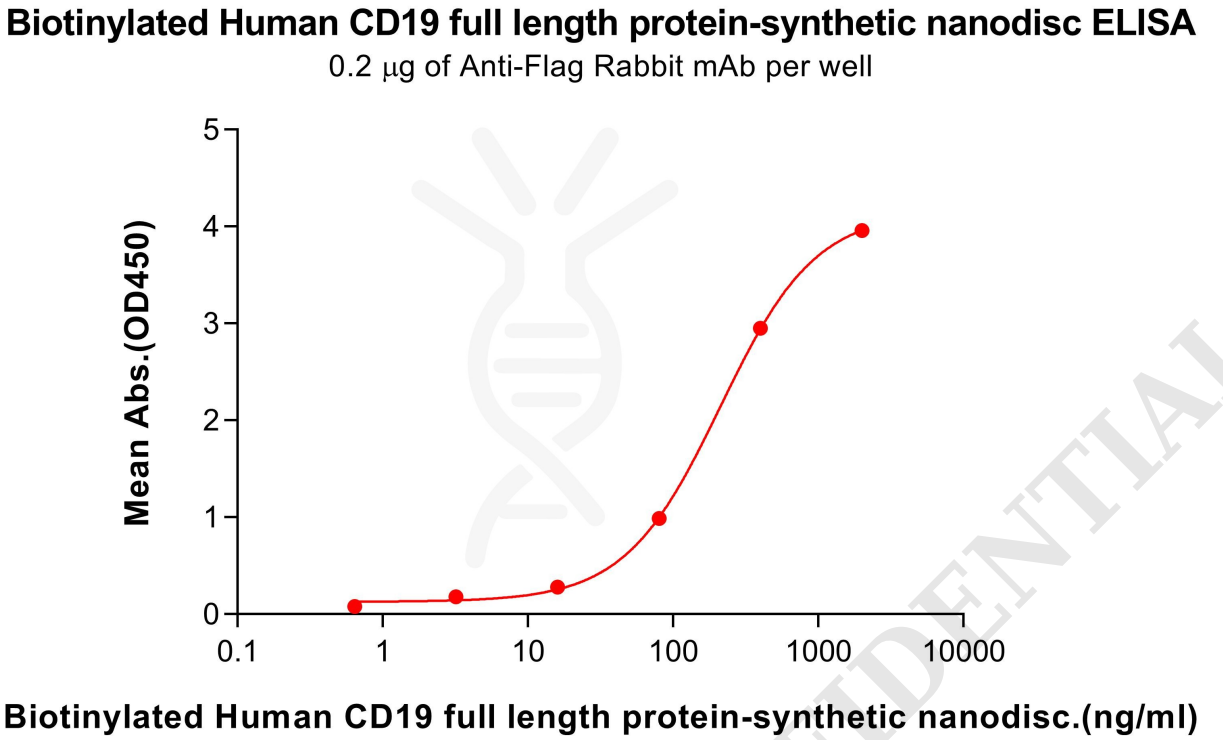


Figure 3. ELISA plate pre-coated by 2 μg/mL (100 μL/well) Anti-flag Rabbit mAb can bind Biotinylated Human CD19 full length protein-synthetic nanodisc (FLP100499B) in a linear range of 80-2000 ng/mL. In order to specifically detect FLP100499B, HRP Conjugated Streptavidin was used as detection antibody.

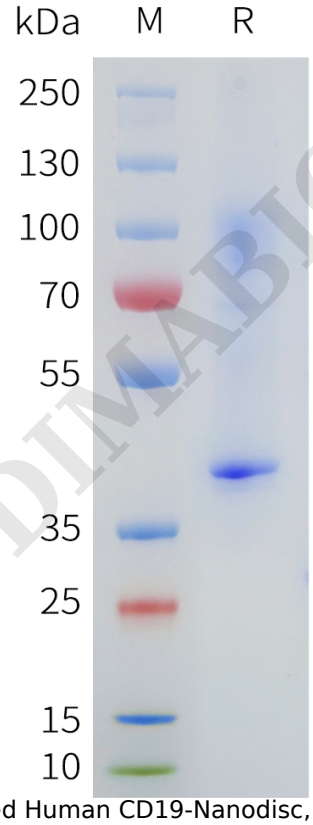


Figure 4. Biotinylated Human CD19-Nanodisc, Flag Tag on SDS-PAGE



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